

Abstract of the Disclosure

A vestigial sideband VSB receiver for receiving signals which are transmitted by being modulated in a vestigial sideband method and a carrier wave restoring method are disclosed, in which the VSB receiver includes a digital processing part for selecting a desired channel frequency via an antenna and converting the desired channel frequency to an intermediate frequency to digitalize a predetermined band of the intermediate frequency, a carrier wave restoring part for extracting pilot components from a signal of the digitalized pass band to restore carrier waves, and a demodulator for separating components I and Q from signal of the digitalized pass band and multiplying the components with a complex carrier wave, which is restored in the carrier wave restoring part, wherein the carrier waves are restored by extracting the pilot signals from the pass band and the symmetrical errors of the carrier wave frequency is detected, so that the carrier wave may be stably obtained and pursued with relation to the both positive and negative frequency offset.